

Work Order ID 59525

Monday, June 07, 2010 8:13:43 AM



Page 1

Item ID: D2904B

Accept



Setup Start



Revision ID:

Item Name: Skidtube, 315

Stop



Start Date: 6/7/2010 Start Qty: 5.00

Cust Item ID:

Required Date: 6/11/2010 Req'd Qty: 5.00

Customer:

Reference:

Approvals:

Process Plan:

Date: 10-6-7

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|--------------|
| D2904 | Rev B |

100

0.00



BENDING MACHINE - SKIDTUBES

CNC Bend 1

Memo

0.00

CNC Delta 100 Bender

Bend on CNC Bending Machine as per Program 315B & dwg D2904 bending detail and Folio FT013

+ Folio 17

DP 10-6-7 (4)

110

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

BE 10/06/07 (4)

120

Identify as per dwg & Stock Location: 416

0.00



Packaging

Memo

0.00

Packaging

DP 10-6-7 (4)

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Work Order ID 59525

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Page 2

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Setup Start



Revision ID:

Item Name: Skidtube, 315

Stop



Start Date: 6/7/2010 Start Qty: 5.00



Cust Item ID:

Required Date: 6/11/2010 Req'd Qty: 5.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/06/08

R106-08
(14)

| W/O: | | WORK ORDER CHANGES | | | | | |
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NOTE: Date & initial all entries

Picklist Print

Monday, June 07, 2010 8:14:02 AM

Page 1

Work Order ID: 59525



Parent Item: D2904B

Parent Item Name: Skidtube, 315

Start Date: 6/7/2010

Required Date: 6/11/2010

Comments: IPP A ☐ 00.10.31 ☐ New Issue ☐ EC ☐

Start Qty: 5.00

Required Qty: 5.00

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| D2914-142 3" Outer Tube | | Manufactured | No | | | | Each | 67.0000 | 1 | 5 | | | |

Location

HALL

14092

Loc Qty

67

67

Loc Code

4

10-6-7

| W/O: | | WORK ORDER CHANGES | | | | | |
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NOTE: Date & initial all entries



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| CHECKED <i>[Signature]</i> | APPROVED <i>[Signature]</i> | DRAWING NO. D2904 | Rev. B SHEET 1 OF 3 |
| DATE 00.06.21 | | TITLE SA 315B SKIDTUBE ASSEMBLY | SCALE NTS |
| A | 99.09.09 | NEW ISSUE | |
| B | 00.06.21 | CHANGED ANGLES FOR HOLES | |

PARTS LIST:

| Qty -041 | Qty -042 | Part Number | Description |
|-------------|-------------|---|----------------------|
| | | | |
| X | | D2904-041 | LH SKIDTUBE ASSEMBLY |
| | X | D2904-042 | RH SKIDTUBE ASSEMBLY |
| | | | |
| 2 | 2 | D2646 | CAP |
| 4 | 4 | D2648-3 | WEARPAD |
| 1 | 1 | D2648-5 | WEARPAD |
| 1 | 1 | D2656-13 | WEARSHOE |
| 1 | 1 | D2656-33 | WEARSHOE |
| 1 | | D2904-1 | SKIDTUBE |
| | 1 | D2904-2 | SKIDTUBE |
| 1 | 1 | D2905 | WEB |
| 1 | 1 | D2907 | WEARSHOE |
| 11 | 11 | D2909 | CROSS BOLT SPACER |
| 2 | 2 | D2910 | SKIDTUBE DOUBLER |
| 2 | 2 | D2911 | SKIDTUBE DOUBLER |
| 2 | 2 | D2912 | SKIDTUBE DOUBLER |
| | | | |
| 50 | 50 | ALS7-1032-130 or AKS4-1032-130 or ALS4-1032-130 or ALS7-1032-130 | INSERT |
| 54 | 54 | AN960JD10L | WASHER |
| 256 | 256 | MS20601AD4W3 | RIVET |
| 54 | 54 | MS27039-1-08 | SCREW |
| | | | |

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 39525
PA1067

RELEASED
20.09.01 *[Signature]*

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NOTE: Date & initial all entries



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| CHECKED <i>[Signature]</i> | APPROVED <i>[Signature]</i> | DRAWING NO. D2904 | Rev. B SHEET 2 OF 3 |
| DATE 00.06.21 | | TITLE SA 315B SKIDTUBE ASSEMBLY | SCALE 1:20 |

GENERAL NOTES:

1. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
2. MAKE D2904-1 AND D2904-2 FROM D2914 EXTRUSION (INITIAL LENGTH = 142.0).
3. DAMAGE TOLERANCE ON BENDING:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 7 INCHES ABOVE THE GROUND. NO GOUGING IS ACCEPTABLE IN THE FLAT PORTION OF THE TUBE. GOUGES UP TO 0.020 ARE ACCEPTABLE IN THE BENT PORTION OF THE TUBE. TUBE O.D. SHOULD BE 3.150 ± 0.010 IN THE FLAT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
4. ALL HOLES DRILLED ON CENTERLINES EXCEPT THOSE NOTED BY SECTION C-C.
5. DRILL #30 HOLES ($\varnothing 0.128$ REF) TO LINE UP WITH $\varnothing 0.128$ HOLES IN D2910/D2911/D2912 DOUBLERS. C'SINK $\varnothing 0.239 \times 100^\circ$.
6. BOND D2905 WEB INTO D2904-1 (OR D2904-2) OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
7. WELDING TO BE DONE PER DART QSI 004.
8. AFTER DRILLING, BENDING, AND INSTALLING WEB & DOUBLERS, PERFORM THE FOLLOWING FOR $\varnothing 0.500$ HOLES ONLY:
 - CHAMFER HOLE $0.050 \times 45^\circ$
 - INSERT D2909 SPACER (11 PLACES)
 - WELD INTO PLACE
 - GRIND FLUSH
 - DRILL OUT SPACER TO $\varnothing 0.406$
9. FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
 - MINIMUM YIELD TENSILE STRENGTH = 35 ksi
 - MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi
10. FINISH:
 - ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2905 WEB AND D2910/D2911/D2912 DOUBLERS.
 - POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
 - BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
11. DRILL $\varnothing 0.297$ FOR ALS7-1032-130 INSERT USING DT8395 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH.

W/D 58526

RELEASED
00.04.01 *[Signature]*

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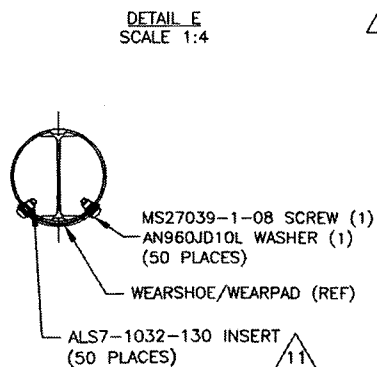
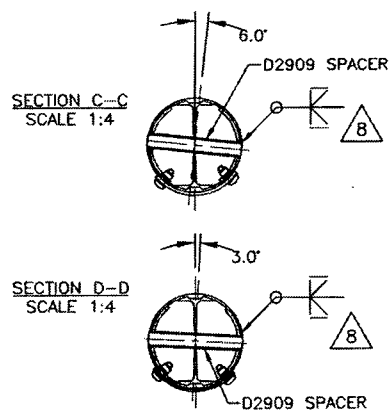
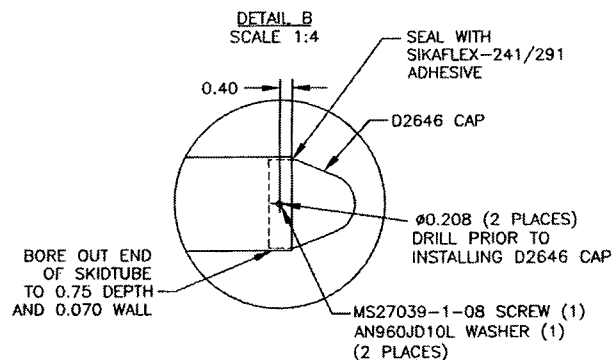
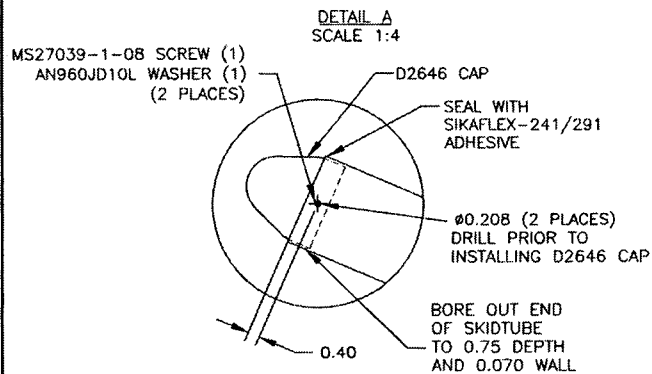
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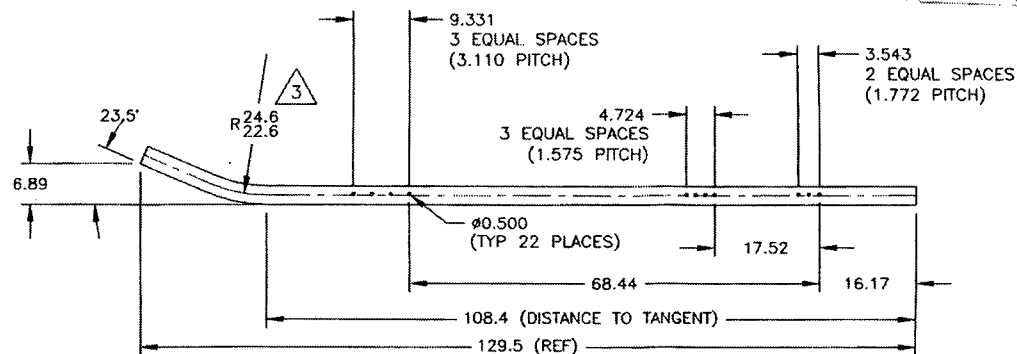
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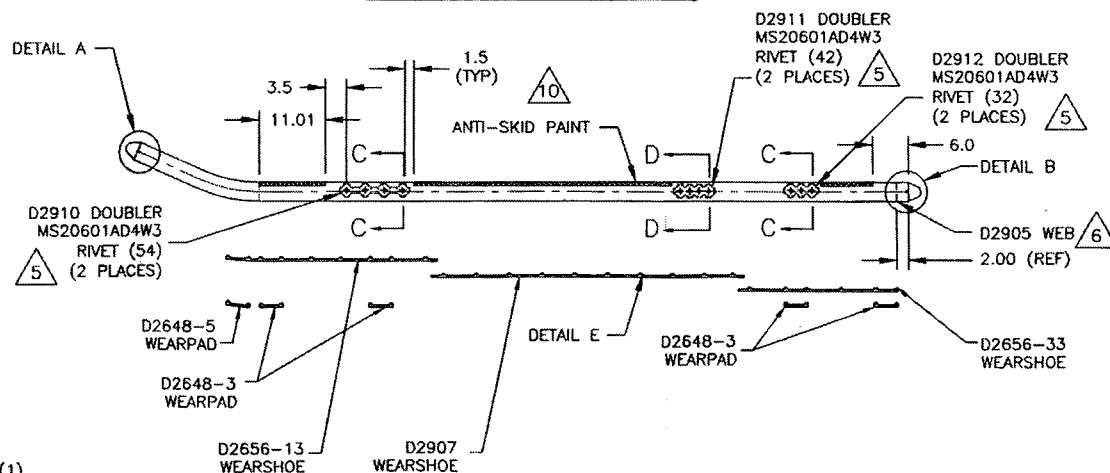
NOTE: Date & initial all entries



D2904-1 BENDING/DRILLING DETAIL (SHOWN)
D2904-2 BENDING/DRILLING DETAIL (OPPOSITE)



D2904-041 LH ASSEMBLY DETAIL (SHOWN)
D2904-042 RH ASSEMBLY (OPPOSITE)



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W/0 59525

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